

ARIZONA TRANSPORTATION RESEARCH CENTER

RESEARCH PEER EXCHANGE – 2005

Getting from Report to Results

Prepared by:

PEER EXCHANGE TEAM

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November 2005

Prepared for:

Arizona Transportation Research Center
Arizona Department of Transportation
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Introduction

The Arizona Department of Transportation (ADOT) Arizona Transportation Research Center (ATRC) conducted a Research Management Peer Exchange from November 1-3, 2005. The Peer Exchange was held in accordance with Federal Highway Administration (FHWA) regulation 23 CFR, Section 420.207(a)(7) which states in part:

- (a) As a condition for approval of FHWA planning and research funds for RD&T activities, a State DOT must develop, establish, and implement a management process that identifies and results in implementation of RD&T activities expected to address high priority transportation issues. The management process must include: . . .
- (7) Participation in peer exchanges of its RD&T management process and of other State DOTs' programs on a periodic basis.

This requirement was further clarified by FHWA in a 1994 guideline stating that peer exchanges be held once every three years.

Peer exchanges were held by ATRC during 1998 and 2002. Those activities were documented in two reports, *Arizona Peer Exchange – February 23-25, 1998*, and *Peer Exchange—2002*.

The 2005 Peer Exchange Team was comprised of six members. The peer exchange activities included interviews with ATRC staff, a meeting with the ADOT executive research Steering Committee, a meeting with the ADOT Research Council, discussions among the Peer Exchange Team and a closeout meeting with the Transportation Planning Division Director. Meetings were held at ADOT East, 2739 East Washington Street, Phoenix, Arizona and the ADOT main Administration Building, 206 South 17th Avenue, Phoenix, Arizona.

The focus of the Peer Exchange and this report is to identify research program strengths and opportunities for improvement with respect to research implementation at ADOT. While this report documents the activities and conclusions reached by the Peer Exchange Team, the most important element of the process is follow-up action.

Review of Peer Exchange Process

A six-member team was selected by ATRC for the peer exchange. The members of the Peer Exchange Team are listed in *Table 1*.

TABLE 1
Peer Exchange Team Members

Ms. Leni Oman — Team Leader Director of Transportation Research Washington State Department of Transportation (WSDOT)	Ms. Karen King Safety Engineer Federal Highway Administration (FHWA)
Mr. Rick Collins, P.E. Director, Research and Technology Implementation Office Texas Department of Transportation (TxDOT)	Mr. David L. Lippert, P.E. Acting Engineer of Materials and Physical Research Illinois Department of Transportation (IDOT)
Mr. Frank T. Darmiento, P.E. Arizona Department of Transportation Manager Arizona Transportation Research Center (ADOT)	Mr. Glenn E. Roberts, P.E. Chief of Research, Bureau of Materials and Research New Hampshire Department of Transportation (NHDOT)

The primary focus of the Peer Exchange was to review, evaluate and provide recommendations on research implementation activities at ADOT. To accomplish this objective, the Peer Exchange Team conducted the following activities:

- Reviewed the ATRC research program, including implementation and management involvement.
- Reviewed the ATRC project tracking process and system.
- Discussed team member state implementation and management participation.
- Reviewed presentations from ATRC research project managers on research implementation activities. (See *Appendix A*.)
- Reviewed a presentation by the ATRC Librarian on library support activities and research document publication.
- Participated in a meeting of the ADOT research Steering Committee.
- Participated in a meeting of the ADOT Research Council.
- Evaluated the information gathered and prepared recommendations related to research implementation at ADOT and identified key strategies and ideas that can be applied to other Team members' own programs or activities.
- Presented findings to ATRC and Dale Buskirk, the Director of the ADOT Transportation Planning Division.

The Peer Exchange agenda is attached in *Appendix B*.

A list of attendees at the ATRC opening session and summaries of the Steering Committee and Research Council meetings are attached in *Appendix C*. A list of current Steering Committee and Research Council members is attached in *Appendix D*.

Background Information

One of the emerging elements of the ATRC research program is research implementation. Much of the value in research is measured by how useful the completed products are. Implementation can have a broad range of definitions, including using research results to save lives, save money, improve efficiencies, improve effectiveness, assist in decision making, or help to evaluate a strategy. In some cases research provides the foundation for more advanced research that will provide the results described.

The three primary areas of interest at ADOT with respect to research implementation are maximizing the use of completed research, enhancing processes within ADOT that facilitate implementation, and tracking this information. Identifying and quantifying the research results that are put to use provides the basis for evaluating the research program effectiveness. In most cases ATRC does not determine whether or how research results are implemented. However, implementation has a significant influence on research effectiveness. Also, since ATRC does not implement research directly, it must rely on other sources of information in order to evaluate the research results.

The Arizona Transportation Research Center is part of the Transportation Planning Division (TPD). Current staffing in ATRC includes five project managers, one librarian, one field technician a part-time Library assistant and a part-time engineering assistant for the Product Resource Investment Deployment and Evaluation (PRIDE) program. Consultants provide additional support for the PRIDE program. The TPD administrative services group provides part-time administrative support for ATRC. Organization charts for ADOT and ATRC are shown in *Appendix E*.

The primary functions of ATRC are:

1. Coordinate the research component of the State Planning & Research program.
2. Coordinate the ADOT PRIDE program.
3. Manage the ADOT library.
4. Provide in-house (ADOT) transportation research support services.

The Research Council provides technical oversight of the research program. The Steering Committee provides policy guidance for the total research effort. Research projects utilize technical advisory committees (TACs) to oversee project activities.

ATRC has recently developed a Microsoft Access database to track all project activities, including implementation. The database contains descriptive information about the research, contract and study information, report publication data and categories for implementation activities, successes and problems.

The ATRC budget is approximately \$3.1 million annually. Of this, approximately \$2.6 million is provided through the FHWA State Planning & Research program.

Observations of the Arizona Transportation Research Center

This section presents observations of the Peer Exchange Team. General observations are presented along with specific recommendations.

The Peer Exchange Team discussed implementation of research results with the research Steering Committee and Research Council. Generally, the Committee and Council feel that research results are being used within the agency. However, they believe that research program processes can be further formalized to support implementation of research results.

The Research Steering Committee is interested in supporting implementation but does not have a direct process role. The Research Council believes that implementation of research results, while facilitated by ATRC Project Managers, is the responsibility of the Project Champion, Project Sponsor, and Technical Advisory Committees rather than a function of the Council. ATRC provides process support and documents implementation activities of research results.

A summary of research program strengths and opportunities for improvement developed by the Peer Exchange Team is presented below. While the primary focus is research implementation, program elements that affect implementation are also addressed.

Strengths

- The Research Steering Committee and Research Council value ATRC.
- There is a belief at the executive level that research can and should drive agency policy.
- ATRC has talented and dedicated staff.
- The ATRC manager is a change catalyst and has improved exposure of research products and brought more focus to aligning projects with agency needs.
- The Research Project Log database is a good tool for documenting research project progress and outcomes.
- There are demonstrated examples of implementation successes in all seven research emphasis areas on which to build.
- The Research Council is interested in research processes and activities.
- The Project Managers and Research Council understand the importance of serving the needs of research program customers.
- The Research Council considers the new small project funding to be valuable.
- Agency employees, including executives, use and respect the research project selection process rather than preempting it.
- The Research Council expects that most research projects will result in implementable outcomes.
- The project examples presented to the Peer Exchange Team demonstrate that research contributes to change in the agency.
- Fiscal year scheduling is not a constraint for the research program.

Opportunities

- Improve dialog with Executive Management regarding research either through the Steering Committee or other means (such as Core Team Meetings).
- Clarify the role and membership of the Steering Committee and develop a Charter if this entity continues.
- Clarify the division of roles between the Steering Committee and the Research Council in supporting implementation of research results.
- Develop project Sponsor and project Champion roles and processes.
- The Research Council is interested in formalizing processes (for example, documenting champion and sponsor roles and the implementation expectations of champions, sponsors, and TACs)
- The research Steering Committee expects to receive recommendations from ATRC on research program issues.
- There is a perception within the agency that the ATRC resources could be better utilized.
- Continue development of improvements to monitor and track implementation activities.
- Consider setting aside funds to support specific implementation activities.
- Document performance measures and communicate them to the Core Team. Consider assessment of results, development of the implementation plan, identification of performance measures related to the plan, tracking results of implementation, and assessing lessons learned in the project implementation for future project selection process improvements.
- Update the Research Procedures Manual to capture current processes and new roles and functions.
- Maintain connections with national peers to continually improve agency practices i.e., participate in the American Association of State Highway and Transportation Officials (AASHTO) National Research Advisory Committee (RAC), Transportation Research Board (TRB), and other regional and national research meetings.

Peer Exchange Team Member Comments

The ADOT Research Peer Exchange yielded a number of ideas and best practices that Peer Team members will consider for use in their own organizations. Practices of note include:

Rick Collins, TxDOT

- Review how research programs work around fiscal year constraints.
- Review other states' project evaluation methods
- Review other states' research procedures manuals to look for ways to simplify TxDOT manual.
- Review the ADOT small project program (\$15K or less)
- Consider focusing on one topic in the next Research Peer Exchange (ADOT).

Frank Darmiento, ADOT

- Consider a separate budget item for implementation.
- Evaluate the use of formal implementation meetings.
- Review formal implementation processes used by other states.
- Update the Research Procedures Manual.

Karen King, FHWA Arizona Division

- Create a network with other Division Research Engineers.
- Be more engaged in the research project development phase.
- Engage Division Technical Experts in their areas.

Dave Lippert, IDOT

- The Research Manager organization used by ADOT is a successful style that Illinois could consider for the Physical Research section.
- Illinois would benefit from including implementation in the next peer exchange.
- ADOT is in the process of developing an implementation tracking system that Illinois can consider for adoption.
- Having the exchange focus on fewer topics allowed more in depth discussion of the topic.
- ADOT's small projects program is a great benefit and can be considered for Illinois
- NHDOT's use of a project "sponsor" is also used by many states and should be a considered requirement.
- TxDOT's Research Innovations (online) publication is a good method to highlight important projects that Illinois could use to highlight research projects beyond the current newsletter.

Leni Oman, WSDOT

- Continue efforts to develop a small project program (ADOT)
- Look at need and possibility to establish contingency set aside (NHDOT, TxDOT)
- Look further at ADOT voting process
- Require an agency sponsor for research problem statements submitted – NHDOT

- TxDOT implementation program can address activities not identified through research – consider opportunities to apply this
- Consider a roundtable discussion of implementation opportunities for research projects – NHDOT
- Initiate annual or biennial innovations recognition – TxDOT
- Add implementation parameters to the WSDOT project tracking database – ADOT
- Review and consider IDOT research project flyer format
- Review implementation elements in IDOT problem statement and consider adapting to WSDOT problem statement format

Glenn Roberts, New Hampshire DOT

- Review the emphasis/functional areas utilized by ADOT, WSDOT, TxDOT, and IDOT in relation to New Hampshire's ongoing development of Research Focus Groups.
- Take a more detailed look at ADOT's Implementation Tracking Database. Add implementation pages to NHDOT's Research Project Database.
- Investigate TxDOT's "Top Research Innovations and Findings" and ADOT's "Research Implementation Report" documents.
- Consider hiring a technical editor to review reports for grammatical content and readability.
- Ask for and review Research Manuals from other Peer Exchange team members.
- Strive for more regular participation in significant NHDOT meetings (e.g., Major Staff, Construction School) to increase exposure and foster an enhanced dialog on how research can help meet agency goals.
- Consider ways to recognize outstanding innovations and research achievements.

Conclusion

The 2005 research peer exchange at ADOT delved into practices, processes and strategies related to transportation research implementation. The suggestions and recommendations presented in this report will provide a framework for ongoing improvements at ADOT and in the Peer Exchange Team member organizations.

ADOT will publish a follow up report approximately one year from the date of this report. If you've read this far you'll almost certainly want to read the follow up report.

*Implementation:
Knowledge is not achieved until shared.*

Appendix A

Summary of Implementation Examples Presented

Summary of Implementation Examples Presented

The ATRC project managers presented examples of research implementation to the Peer Exchange Team. Five ATRC research projects were selected for review with the Team.

Project: SPR-477, *Highway Cost Allocation Study Model Update*

Project Manager: John Semmens

The Arizona Simplified Model for Highway Cost Allocation Studies (Arizona SMHCAS) was developed in 1999 as an alternative to the complicated model for highway cost allocation then available to the Arizona Department of Transportation. The Arizona SMHCAS was refined in 2000 and back-tested to determine its suitability as a replacement for the old Arizona highway cost allocation model. Based on this testing, and on continuing problems with use of the old Arizona model, the Arizona SMHCAS was determined to be a suitable replacement. A training program for implementation of the SMHCAS model by Arizona Department of Transportation staff was subsequently initiated. The principal means of conducting the ADOT staff training was a complete update of the Arizona Simplified Highway Cost Allocation Model for fiscal 2001 to 2005. Throughout the course of this training program and update, several improvements were made to the Arizona SMHCAS based on feedback from ADOT personnel. These improvements included the aggregation of line item expenditure data into broader categories, the addition of input categories for state highway spending funded through “non-traditional” means (e.g., the Maricopa Freeway System funded *via* a transportation excise tax), and the addition of revenue input categories for future means of funding, including separate inputs for future weight-based, travel-based and flat user fees. Furthermore, all growth rate calculations were converted to a three-year rolling average to minimize the impact of variance in single year observations, and new tables were added to simplify the reporting of local government expenditures. Finally, based on a consensus in the literature regarding allocation of capacity-driven expenditures, passenger car equivalency factors were added as an option for allocating cost responsibility in urbanized areas. The study produced a low-cost method for evaluating the equity of highway user taxes. The FMS of ADOT uses this model to respond to inquiries regarding potential changes in the tax structure.

Project: SPR-494, *Enhance the Pavement Management System so that It Can Determine Preventative Maintenance Strategy Effectiveness*

Project Manager: Yongqi Li

A four-day training for pavement management and design personnel was held from October 17-20, 2005 as the first step of implementation. Two additional training sessions (primarily for maintenance personnel) will be held during December 2005 and January 2006. The ultimate goal is to have the system used by the majority of people involved in pavement preservation and maintenance activities.

Project: SPR-519, *Dust Mitigation: PM-10 for Developing Educational Tools & Outreach Programs*

Project Manager: Tom Kombe

This project developed an educational outreach and certification program for the Maricopa County PM10 non-attainment area. The outreach program is intended for educational use statewide. The ADOT Transportation Planning Division (TPD) Air Quality Programs section worked with the consultants to finalize a training package. The logo “Blue Skies Training Program” was adopted for this training. On June 11th, 2004 the first training session was conducted and was very successful. Another session was held late 2004 in Pinal County. There are plans to implement an online training package—presently in the early stages of development. In the meantime, the training material is available on the TPD/Air Quality web site. (<http://tpd.azdot.gov/air/index.htm>) Related information is also available at the site.

Project: SPR-570, *Rural ITS Progress Study - Arizona 2004*

Project Manager: Steve Owen

The project conducted field interviews and surveys with all ADOT Districts, as well as elements of the Department of Public Safety, the Motor Vehicle Division ports, and travelers, including the public and truckers. The results defined the status of current rural Intelligent Transportation System (ITS) elements including ownership and operating and maintenance costs, perceived benefits to districts and the public, and issues for each type of system. Implementation of recommendations is a gradual, ongoing process with regard to wider deployments and to operating practices. The ADOT Transportation Technology Group (TTG) references the report in requests for further funding in all areas as relevant.

Project: SPR-590, *Performance Related Pay Factors for Asphalt Concrete*

Project Manager: Christ Dimitroplos

This study is working toward developing a linkage between asphalt concrete pay factors and pavement performance and pavement design. It will be very beneficial to have pay factors that are based upon actual pavement performance and design procedures. The recently completed National Cooperative Highway Research Program (NCHRP) 2002 Pavement Analysis tool provides the capability to evaluate the effect of these mixture characteristics on pavement design and performance. Therefore, rational pay factors could be determined based upon actual design conditions and attendant pavement performance.

Appendix B

Peer Exchange Agenda

Arizona Transportation Research Center

Research Peer Exchange
November 1-3, 2005

Getting from Report to Results

OBJECTIVES

- Review Arizona Department of Transportation (ADOT) implementation monitoring processes
- Review the involvement of the ADOT Research Council, Steering Committee and ATRC customers in research implementation
- Develop ideas for facilitating implementation—better ways to get from *Report to Results*

Agenda

Monday, October 31, 2005

2:00 – 6:00 p.m.

Check-in at hotel

Hampton Inn Scottsdale

4415 N Civic Center Plaza

Scottsdale AZ 85251

480-941-9400

8:00 p.m.

Welcome dinner

Bravo Bistro

4327 N. Scottsdale Rd.

Scottsdale AZ 85251

480-481-7614



Tuesday, November 1, 2005

8:30 a.m. – 12:00 p.m.

- Overview of ATRC program including implementation and management involvement
- Review of ATRC project tracking process and system
- Discuss team participant state programs – overview and specific discussion of implementation and management participation

12:00 p.m. – 1:00 p.m.

Lunch

1:00 p.m. – 3:00 p.m.

- Review implementation of one project in each of 7 emphasis areas
- Review of Library functions, web site, document distribution and marketing

3:00 p.m. – 4:30 p.m.

Team review and discussion

Wednesday, November 2, 2005

8:30 a.m. – 11:30 a.m.

- Review Colorado DOT implementation tracking table
- Review of Ohio DOT implementation guide
- Prepare for Steering Committee & Research Council meetings

11:30 a.m. – 12:00 p.m.

Lunch

12:30 p.m. – 1:00 p.m.

Meet with Steering Committee

1:00 p.m. – 3:00 p.m.

Attend Research Council meeting:

- Part I – audit business meeting
- Part II – interview Research Council

3:00 p.m. – 4:30 p.m.

Team review and discussion

Thursday, November 3, 2005

8:30 a.m. – 11:00 a.m.

- Prepare draft report

11:00 a.m. – 12:00 p.m.

- Present findings to Transportation Planning Division Director, Dale Buskirk & ATRC

Appendix C
Meeting Attendees and Steering Committee and
Research Council Meeting Summaries

November 1, 2005

Meeting with Peer Exchange Team and ATRC Staff

Attendees:

Peer Exchange Team

Rick Collins – TxDOT
Frank Darmiento – ATRC (ADOT)
Karen King – FHWA
David Lippert – IDOT
Leni Oman – WSDOT
Glenn Roberts – NHDOT

ATRC Staff:

Christ Dimitroplos – Project Manager
Tom Kombe – Project Manager
Yongqi Li – Project Manager
Steve Owen – Project Manager
John Semmens – Project Manager
Dale Steele – Librarian



Arizona Department of Transportation
Transportation Research Center – Mail Drop 075R
2739 E. Washington Street • Phoenix, Arizona 85034

MEMORANDUM

To: DISTRIBUTION LISTED *

Date: November 8, 2005

From: Frank T. Darmiento
Tel: (602) 712-3134
e-mail: fdarmiento@dot.state.az.us

Subject: **MEETING SUMMARY —**
Research Steering Committee

DATE: November 2, 2005

LOCATION: Arizona Department of Transportation Board Room, 206 S. 17th Ave.,
Phoenix, Arizona

ATTENDEES:

Research Steering Committee

Jim Dickey, Public Transportation Division Director
Sam Elters, State Engineer
David Jankofsky, Deputy Director

Research Peer Exchange Team

Rick Collins, Texas Department of Transportation
Frank Darmiento, Arizona Transportation Research Center (ATRC)
Karen King, Federal Highway Administration
David Lippert, Illinois Department of Transportation
Leni Oman, Washington State Department of Transportation
Glenn Roberts, New Hampshire Department of Transportation

Christ Dimitroplos, ATRC
Tom Kombe, ATRC
Yongqi Li, ATRC
Steve Owen, ATRC
John Semmens, ATRC
Dale Steele, ATRC

SUMMARY

A meeting of the Arizona Department of Transportation (ADOT) research Steering Committee was held as noted above. The meeting was held in conjunction with a research Peer Exchange. The Peer Exchange Team members participated in the meeting. Items discussed during the meeting are summarized below.

1. The Steering Committee members in attendance were all new to the Committee since the last meeting. Two new project managers, Christ Dimitroplos and Yongqi Li, have also joined the Arizona Transportation Research Center (ATRC) staff in 2005.
2. The memberships of the Research Council and Steering Committee were reviewed. Frank Darmiento reviewed the process for selecting Research Council members. Council membership is voluntary. There are no automatic members. New members are suggested to the ATRC manager. After review by the ATRC manager, recommendations for new Research Council members are sent to the Steering Committee for consideration.
3. David Jankofsky asked about other functions of the Steering Committee. He asked for comments from the Peer Exchange Team members about executive participation in the research programs in their states. Given the difficulty of scheduling Steering Committee meetings and the limited tasks they have, he suggested that Steering Committee matters could be taken care of during CORE Team meetings.

Frank T. Darmiento



Arizona Department of Transportation
Transportation Research Center – Mail Drop 075R
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MEMORANDUM

To: DISTRIBUTION LISTED *

Date: November 8, 2005

From: Frank T. Darmiento
Tel: (602) 712-3134
e-mail: fdarmiento@azdot.gov

Subject: **MEETING SUMMARY —**
Research Council

DATE: November 2, 2005

LOCATION: Arizona Department of Transportation Board Room, 206 S. 17th Ave.,
Phoenix, Arizona

ATTENDEES:

Research Council

Julio Alvarado, Construction Group
Brock Barnhardt (representing Shannon Wilhelmsen), Communication and
Community Partnerships
Charles Bitner, Motor Vehicle Division
Ken Cooper (representing Mary Viparina), Assistant State Engineer
Frank Darmiento, Arizona Transportation Research Center (ATRC) – chairman
Jim Dickey, Director - Public Transportation Division
Doug Forstie, Deputy State Engineer
Steve Jimenez, Valley Project Management
Denise Johnson (representing Lisa Mattke), Information Technology Group
Karen King, Federal Highway Administration (FHWA)
Jean Nehme, Bridge Group
Julie Nodes (representing Jim Delton), Materials Group
Tom Parlante, Traffic Group
Tim Wolfe, Transportation Technology Group

Research Peer Exchange Team

Rick Collins, Texas Department of Transportation
Frank Darmiento, ATRC
Karen King, FHWA
David Lippert, Illinois Department of Transportation
Leni Oman, Washington State Department of Transportation
Glenn Roberts, New Hampshire Department of Transportation

Christ Dimitroplos, ATRC
Sam Elters, State Engineer
David Jankofsky, Deputy Director

Tom Kombe, ATRC
Yongqi Li, ATRC
Steve Owen, ATRC
John Semmens, ATRC
Dale Steele, ATRC

SUMMARY

A meeting of the Arizona Department of Transportation (ADOT) Research Council was held as noted above. The purpose of the meeting was to conduct business related to ADOT's research program. The meeting was held in conjunction with a research Peer Exchange. The Peer Exchange Team members participated in the meeting. Items discussed during the meeting are summarized below.

4. Frank Darmiento asked for clarification of the manner in which small budget proposals are evaluated by the Research Council. The following guidelines were adopted by the Research Council.
 - If a majority of Research Council members vote in favor of a proposal it will be funded. The project manager will work with Research Council members who have comments or questions about the proposal.
 - If there is not a majority in favor of the proposal and one or more Research Members suggests further discussion then further dialogue will be pursued, either at a Council meeting or through e-mail.
 - If a majority of Research Council members do not approve the proposal (either by voting against it or not voting) and there are no requests for further discussion, the proposal will not be approved for funding.
5. One small budget proposal was discussed and evaluated by the Research Council members present. The proposal was SB2005-08, *Quantifying the Impact that Opening a New Segment of Freeway Has on Adjacent Major Arterial Street Congestion*. The proposal was approved by a vote of 13 to 0. The project manager, John Semmens, will work with Research Council members who had suggestions or comments on the proposal to refine the work scope.
6. The Research Council considered a proposal by Frank Darmiento to require Champions or Sponsors for all new research proposals and projects. After discussion the Council directed that all new projects have both a Champion and a Sponsor. A Champion is a person promoting a project with a direct interest in the study results. A Sponsor is a person with the authority to move a project forward. The Sponsor will have the authority to approve Technical Advisory Committee members (subject to Research Council oversight) and the work plan (subject to ATRC oversight). The Champion and Sponsor could be the same person. All Sponsors will be ADOT employees unless an exception is approved by the Research Council.
7. The balance of the meeting was devoted to the research peer exchange topic, research implementation. Some of the comments and suggestions made are summarized below.
 - For completed projects, assess the usefulness and applicability of the results; determine how the results should be implemented; and establish criteria to measure the implementation

- The implementation process should be formalized
- The Champions and Sponsors are key individuals in project implementation
- If possible, use the Research Council to help influence implementation.

Frank T. Darmiento

Appendix D
List of Steering Committee and
Research Council Members

Research Council Members

Name	Mail Drop	Group
Julio Alvarado	172A	Construction Group
Charles Bitner	500M	Motor Vehicle Division
Dale Buskirk	310B	Director, Transportation Planning Div.
Frank Darmiento – chairman	075R	Transportation Research Center
Jim Delton	068R	State Materials Engineer
Jim Dickey	310B	Director, Public Transportation Div.
Doug Forstie	102A	Deputy State Engineer
John Harper	F500	Flagstaff District Engineer
Lonnie Hendrix	176A	State Maintenance Engineer
Steve Jimenez	614E	Valley Project Management
Karen King	005R	Federal Highway Administration
Dan Lance	102A	Deputy State Engineer
Sam Maroufkhani	102A	Deputy State Engineer
Lisa Mattke	119A	Information Technology Group
Jean Nehme	269E	Bridge Group
Tom Parlante	061R	Traffic Engineering Group
Rick Powers	G300	Globe District Engineer
Mary Viparina	611E	Assistant State Engineer
Shannon Wilhelmsen	101A	Communication and Community Partnerships
Tim Wolfe	PM02	Transportation Technology Group

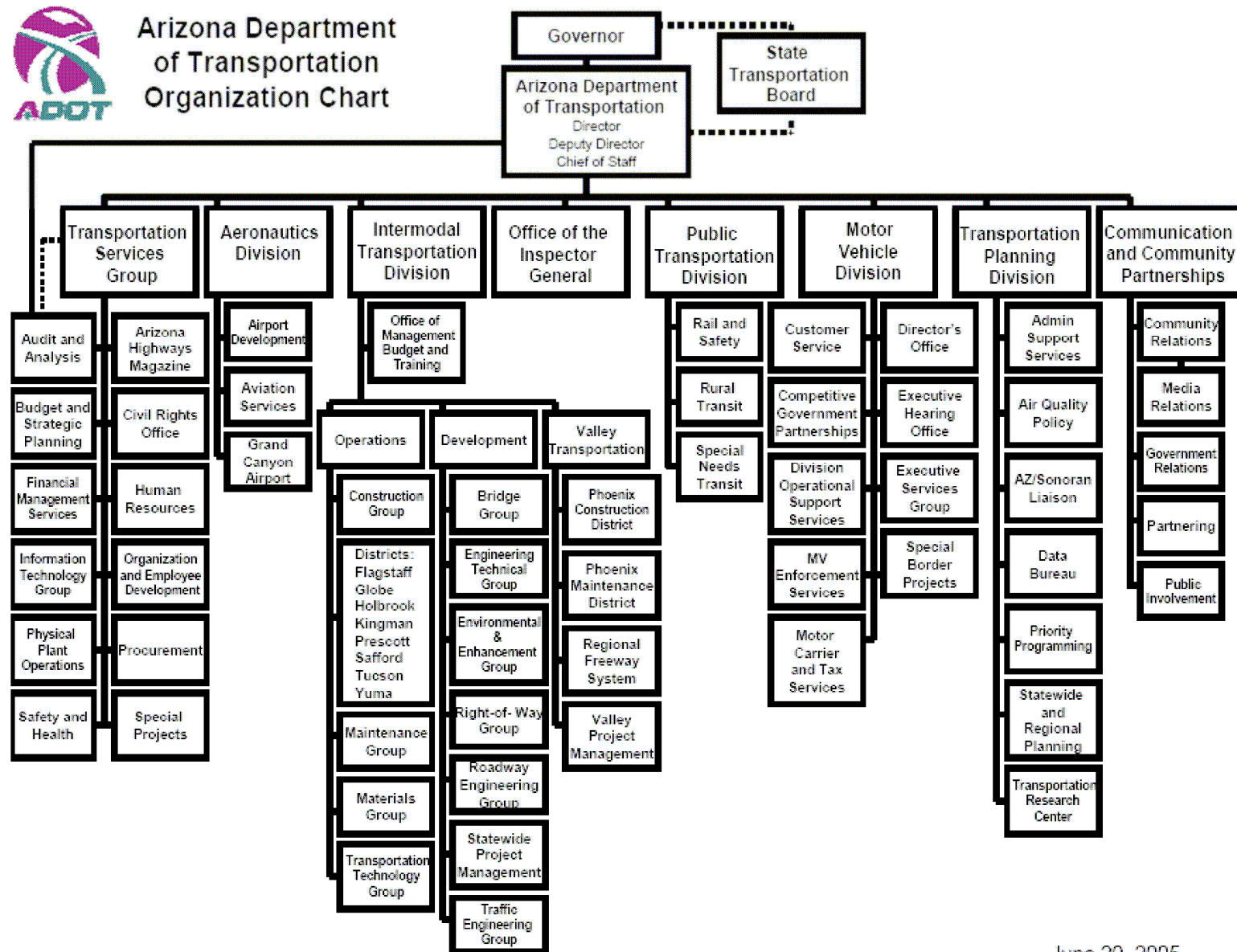
Research Steering Committee Members

Name	Mail Drop	Group
John Bogert	100A	Chief of Staff
Dale Buskirk	310B	Director TPD
Jim Dickey	310B	Director, Public Transportation Div.
Sam Elters	102A	State Engineer
Robert Hollis	005R	FHWA
David Jankofsky	100A	Deputy Director
Victor Mendez	100A	Director
Stacey Stanton	500M	Director-MVD

Appendix E
ADOT and ATRC Organization Charts



Arizona Department of Transportation Organization Chart



June 20, 2005

Arizona Transportation Research Center

Organization Chart - 10/25/2005

